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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/041,698	03/13/1998	STEPHAN HUFFER	47852	3698

26474 7590 09/08/2003

KEIL & WEINKAUF  
1350 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036

EXAMINER
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LU, C CAIXIA

ART UNIT	PAPER NUMBER
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1713

22

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS 22

**Office Action Summary**

Application No.

09/041,698

Applicant(s)

HUFFER ET AL.

Examiner

Caixia Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 does not have a logic flow. For example, (i) line 3, the object flowing the term "containing" is missing, and (ii) the process is defined by components such as "b)" and "c)" rather than steps.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over 35 U.S.C. 103(a) as being unpatentable over Shinosaki et al. (JP 07-025946, translated copy), and Noristi et al. (US 5,244,854) independently.

The instant claims are directed to a process for preparation of polypropylene homopolymer in the presence of a Ziegler-Natta catalyst system comprising a) a titanium-containing solid component, b) an aluminum compound cocatalyst, and c) a further electron donor, wherein the preparation of the titanium-containing solid component as a part of the process comprising i) reacting a chlorine-free magnesium alkyl compound with an inorganic oxide carrier, and then an alkanol to form a

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intermediate product; and ii) reacting the intermediate product of step i) with titanium halide and an electron donor to provide a solid titanium catalyst.

Shinosaki teach a process for the preparation of polypropylene homopolymer in the presence of a catalyst system comprising (a) a solid titanium catalyst component, (b) an aluminum compound, and (c) silicon compound --the electron donor (page 17, [0049], page 26, [0086]-[0090]); wherein the solid titanium catalyst component is prepared by "a process that brings a contact-reaction product of an inorganic carrier and an organomagnesium compound into contact with a titanium compound and preferably with an electron donor" (page 22, (3)). The magnesium compound (chlorine-free), titanium compound and electron donor are particularly taught in page 18, [0055], page 19, [0057] to [0059], pages 20-21, [0064], which encompass those of the instant claims.

The Working Example 1 of Shinosaki teaches the preparation of the solid titanium catalyst component (a) which satisfies all the limitation of the instant claims except that an inorganic oxide carrier is not used and the magnesium compound used is not chlorine-free, magnesium chloride is used instead. However, as indicated above, inorganic carriers such as silica and magnesium compound such as alkoxy magnesium (prepared by reacting dialkylmagnesium and alcohol) can be used in preparation of the solid titanium catalyst component. Thus, Shinosaki generically teaches all of the process limitations of the instant claims.

Noristi teach a process for preparation of polypropylene with high isotacticity in the presence of a catalyst system comprising a solid titanium catalyst component, (b) an

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aluminum compound, and (c) silicon compound --the electron donor (Table 1B; col. 3, line 59; col. 4, lines 26-48; col. 5, lines 6-36; and col. 6, lines 29-54).

Noristi does not particular teach a process which is identical to that of the instant claims for the preparation of the solid titanium catalyst component; however the generic teaching of the process encompasses that of the instant claims (Table 1B; col.3, line 59; col. 4, line 48; col. 5, lines 6-17 and line 44; and col. 6, lines 29-54).

Thus, it would have been obvious to a skilled artisan at the time the invention was made to arrive at the same or substantially similar the solid titanium catalyst component by pick and choose any of the processes disclosed in the cited prior art such as the one which is identical or substantially identical to the process of the instant claims since such is within the generic disclosure of the cited prior art and all of the embodiments of the reference are expected to work and in the absence of any showing of criticality and unexpected results.

### ***Conclusion***

5. The instant amended claims differ from the rejected claims before the Board of Patent Appeals and Interferences in that the process for the preparation of the catalyst is now a part of the process. The amendment does not render the instant claims novel because the Board has found "that Noristi discloses and suggests each of the limitation for the preparation of the catalyst component" and detailed discussion was followed in the last paragraph on page 4 to the first paragraph on page 7 in Paper No. 17 which included all of the limitations of the instant amended claims. Thus, it is the examiner's position that the Board's decision is still applicable to the instant claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (703) 306-3434.

The examiner can normally be reached on 9:00 a.m. to 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1193.

A handwritten signature in black ink, appearing to read 'Caixia Lu', is positioned above the printed name and title.

Caixia Lu, Ph. D.  
Primary Examiner  
Art Unit 1713

September 3, 2003